

WHAT IS CLAIMED IS:

1. An image distribution system in a virtual space system composed of terminal apparatuses respective provided at plural users and a server apparatus  
5 connected to such plural terminal apparatuses through a communication channel for constructing a virtual space for distributing an image among the terminal apparatuses, wherein each of the terminal apparatuses comprises:  
10 image obtaining means for obtaining an image of the user;  
transmission means for transmitting the image, obtained by said image obtaining means, to said server apparatus;  
15 reception display means for receiving and displaying the image transmitted from said server apparatus;  
designation means for designating the position of the user in said virtual space; and  
20 control means for controlling said image obtaining means according to the position of the user in said virtual space.

2. A system according to claim 1,  
25 wherein said image obtaining means further includes image compression means for compressing the image data; and

wherein said control means controls the compression parameter of said compression means according to said user position in said virtual space.

5       3. A system according to claim 1,

      wherein said image obtaining means includes size conversion means for converting the size of the obtained image and cut-out means for cutting out a predetermined area from the obtained image; and

10       wherein said control means selects the output of said size conversion means or said cut-out means according to said user position in said virtual space.

4. A system according to claim 1,

15       wherein said image obtaining means includes image pickup means for converting an optical image into an electrical signal and image pickup control means for controlling an area and a direction of the image pickup of said image pickup means; and

20       said control means controls the image pickup area of said image pickup means through said image pickup control means according to said user position in said virtual space.

25       5. A system according to claim 1,

      wherein said image obtaining means includes plural image pickup means for converting an optical image into

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an electrical signal; and

    said control means selects one of the outputs of  
    said plural image pickup means according to said user  
    position in said virtual space.

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6. An image distribution system in a virtual space  
    system composed of terminal apparatuses respective  
    provided at plural users and a server apparatus  
    connected to such plural terminal apparatuses through a  
10     communication channel for constructing a virtual space  
    for distributing an image among the terminal  
    apparatuses, wherein each of the terminal apparatuses  
    comprises:

15     image obtaining means for obtaining an image of the  
    user;

    transmission means for transmitting the image,  
    obtained by said image obtaining means, to said server  
    apparatus;

20     reception display means for receiving and  
    displaying the image transmitted from said server  
    apparatus; and

    designation means for designating the position of  
    the user in said virtual space; and said server  
    apparatus comprises:

25     image process means for processing the image  
    transmitted from each of said tereminal apparatuses;  
    distribution means for distributing the image,

processed by said image process means, to each of said terminal apparatuses; and

control means for controlling said image process means according to the position of the user in said  
5 virtual space.

7. A system according to claim 6,  
wherein said image process means includes  
recompression means for recompressing image data; and  
10 wherein said control means controls the compression  
parameter at the recompression, according to the user  
position in said virtual space.

8. A system according to claim 6,  
15 wherein said image obtaining means includes size  
conversion means for converting the size of the image  
and cut-out means for cutting out a predetermined area  
from the image; and  
said control means selects the output of said size  
20 conversion means or said cut-out means according to  
said user position in said virtual space.

9. An image distribution method in a virtual space  
system composed of terminal apparatuses respective  
25 provided at plural users and a server apparatus  
connected to such plural terminal apparatuses through a  
communication channel for constructing a virtual space

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for distributing an image among the terminal apparatuses, wherein each terminal apparatus comprises steps of:

5       recognizing the position of the user in said virtual space;

transmitting a user image corresponding to the recognized user position to said server apparatus; and receiving and displaying the image transmitted from said server apparatus.

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10.     A method according to claim 9,

wherein each of said terminal apparatuses transmits the user image, compressed with a compression rate according to said user position in said virtual space, to said server apparatus.

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11.     A method according to claim 9,

wherein each of said terminal apparatuses applies either of the image size conversion and the predetermined area cutting-out to the obtained image according to said user position in said virtual space, and transmits the image to said server apparatus.

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12.     A method according to claim 9,

25        wherein each of said terminal apparatuses includes image pickup means for converting an optical image into an electrical signal and image pickup control means for

controlling the area and direction of the image picking up by said image pickup means, and controls the area of the image picking up by said image pickup means according to said user position in said virtual space.

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13. A method according to claim 9,

wherein each of said terminal apparatuses includes plural image pickup means for converting an optical image into an electrical signal, and selects one of the outputs of said plural image pickup means according to said user position in said virtual space, and transmits the image obtained by the selected image pickup means to said server apparatus.

15        14. An image distribution method in a virtual space  
system composed of terminal apparatuses respective  
provided at plural users and a server apparatus  
connected to such plural terminal apparatuses through a  
communication channel for constructing a virtual space  
20        for distributing an image among the terminal  
apparatuses, wherein

each of said terminal apparatuses obtains an image of the user and transmits the image to said server apparatus:

25           said server apparatus processes the image  
transmitted from each of the terminal apparatuses  
according to the position of the user in said virtual

space and distributes the image to each of said terminal apparatuses; and

each of said terminal apparatuses receives and displays the image transmitted from said server apparatus.

## 5 apparatus.

15. A method according to claim 14,

wherein said server apparatus recompresses the image transmitted from each of said terminal apparatus with a recompression parameter according to the user position in said virtual space and distributes the image to each of said terminal apparatuses.

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16. A method according to claim 14,

15 wherein said server apparatus applies either of  
image size conversion and predetermined area cutting-  
out to the image transmitted from each of said terminal  
apparatuses according to said user position in said  
virtual space and distributes the image to each of said  
20 terminal apparatuses.

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17. A program executable by reading in a computer for realizing an image distribution method in a virtual space system composed of terminal apparatuses respective provided at plural users and a server apparatus connected to such plural terminal apparatuses through a communication channel for constructing a

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virtual space for distributing an image among the terminal apparatuses, the program causing to realize the image distribution method comprising steps of:

- recognizing the position of the user in said
- 5 virtual space;
- transmitting a user image corresponding to the recognized user position to said server apparatus; and
- receiving and displaying the image transmitted from said server apparatus.

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